

SLOPE MAP OF THE MEEKER AREA RIO BLANCO COUNTY, COLORADO

By Doyle L. Scroggs

Slope Map

This slope map is a graphic representation of the topography of the land surface. Slope should be an important consideration in the design and location of buildings, aite grading, revegetation, transportation routes, utility lines, land-fill sites, and general excavations, as well as slope stability evaluation and drainage and flood control. Slope is only one of many physical considerations and should be used in conjunction with geologic, hydrogeologic, and engineering data. Different land uses have different slope requirements or constraints. For example, a housing development, a mountain recreational complex, a major transportation corridor, and a solid-waste disposal site all have different slope constraints. These constraints may affect general feasibility, cost, drainage, and other critical aspects of a given project.

The six slope categories used on this map are generalized and only indicate the predominant slope. Slope areas that are steeper or gentler than the mapping category may be included when such areas are too small to be depicted at the 40-ft contour interval of the topographic base map from which the slope map was compiled. Therefore, although this map should have sufficient accuracy for land-use planning, it should not be used for individual site analysis or design purposes.

Derivation of Percent Slope

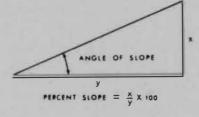
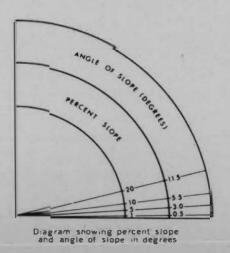


Diagram Showing
Correlation between Percent Slope
and Slope Angle



Scale Showing Correlation between Topographic Contour Line Spacing and Percent Slope

CONTOUR LINE SPACING				
PERCENT SLOPE	3%	8%	12%	20% 30%

MAP EXPLANATION

Very Steep Slopes -- generally suitable only for recreational, agricultural, or open-space use. May have severe avalanche, rockfall, or landslide hazard.

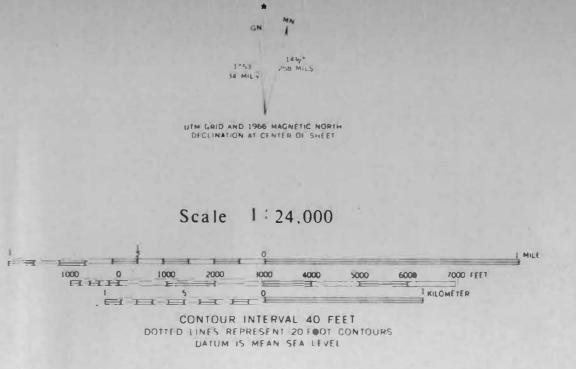
O-30% Steep Slopes -- generally suitable for all above uses. Unstable slopes may prevent all but very costly, carefully engineered construction.

Moderately Steep Slopes -- generally suitable for all above uses. Backslope instability may be a problem in moderately unstable soils; therefore, foundations, cuts, and fills for roads and buildings must be carefully engineered.

8-12% Moderate Slopes -- generally suitable for all above uses. Cuts and fills are generally required for roads and building sites, and therefore, backslope instability may be a problem in extremely unstable soils.

Gentle Slopes -- generally suitable for all above uses and for all roads, building sites, and utility corridors. Solid-waste disposal sites must be carefully controlled to prevent erosion.

Very Gentle Slopes — generally suitable for all above uses and for railroad grades and airfields. May locally have a high water table and poor surface drainage. Even slight grading can cause excessive ponding unless carefully designed and constructed.



DOI: https://doi.org/10.58783/cgs.of7506.ecto9886

Prepared by the COLORADO GEOLOGICAL SURVEY

Department of Natural Resources

Denver, Colorado